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(54) **Zipper strip and packaging using it**

(57) A zipper strip (10) for a reclosable bag or package (110 Figure 8) includes a male interlocking profile (12) and a female interlocking profile (14). The male interlocking profile (12) includes a male interlocking member (16) and a male web (20) coextruded therewith. In like manner, the female interlocking profile (14) includes a female interlocking member (18) and a female web (22). The male interlocking member (16) snappingly engages into the female interlocking member (18) to join the profiles (12, 14) to one another. One of the male and female webs (20, 22) is wider than the other in at least one of two directions extending outwards from the male and female interlocking members (16, 18), the greater width forming at least one flange (24, 26) extending widthwise beyond the other web. The zipper strip (10) is designed to be attached to thermoplastic sheet material (50) by sealing the at least one flange (24, 26) thereto without sealing the male and female webs (20, 22) to each other. Methods for securing the zipper strip (10) to thermoplastic sheet material, and for making packages on a horizontal form-fill-and-seal machine, are also disclosed.

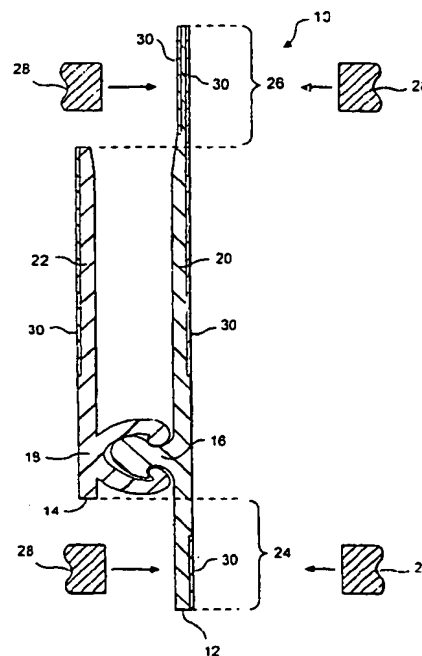


FIG. 1

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EUROPEAN SEARCH REPORT

Application Number
EP 98 30 0178

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
X	WO 97 06062 A (YEAGER JAMES WORTH) 20 February 1997 * page 9, last paragraph - page 10; claim 44; figures *	1-10	B31B19/90
A	EP 0 282 723 A (MINIGRIP EUROPE GMBH) 21 September 1988 * figure 1 *	4	
A	BE 664 523 A (FAYARD ET RAVEL) 16 September 1965 * figure 2 *	1	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			B31B
Place of search		Date of completion of the search	Examiner
THE HAGUE		1 June 1999	Pipping, L
CATEGORY OF CITED DOCUMENTS			
<p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p>			

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ON EUROPEAN PATENT APPLICATION NO.**

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01-06-1999

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9706062 A	20-02-1997	AU 4012495 A	05-03-1997
		CA 2229034 A	20-02-1997
		EP 0843636 A	27-05-1998
		FI 980288 A	09-02-1998
		US 5823933 A	20-10-1998
		US 5782733 A	21-07-1998
EP 0282723 A	21-09-1988	CA 1294473 A	21-01-1992
		DE 3871192 A	25-06-1992
		DK 143888 A	17-09-1988
		FI 881235 A,B,	17-09-1988
		US 4878987 A	07-11-1989
BE 664523 A	16-09-1965	DK 111226 B	01-07-1968
		GB 1102232 A	
		LU 48694 A	26-07-1965
		MC 535 A	07-02-1966
		NL 6509490 A	08-02-1966

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

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